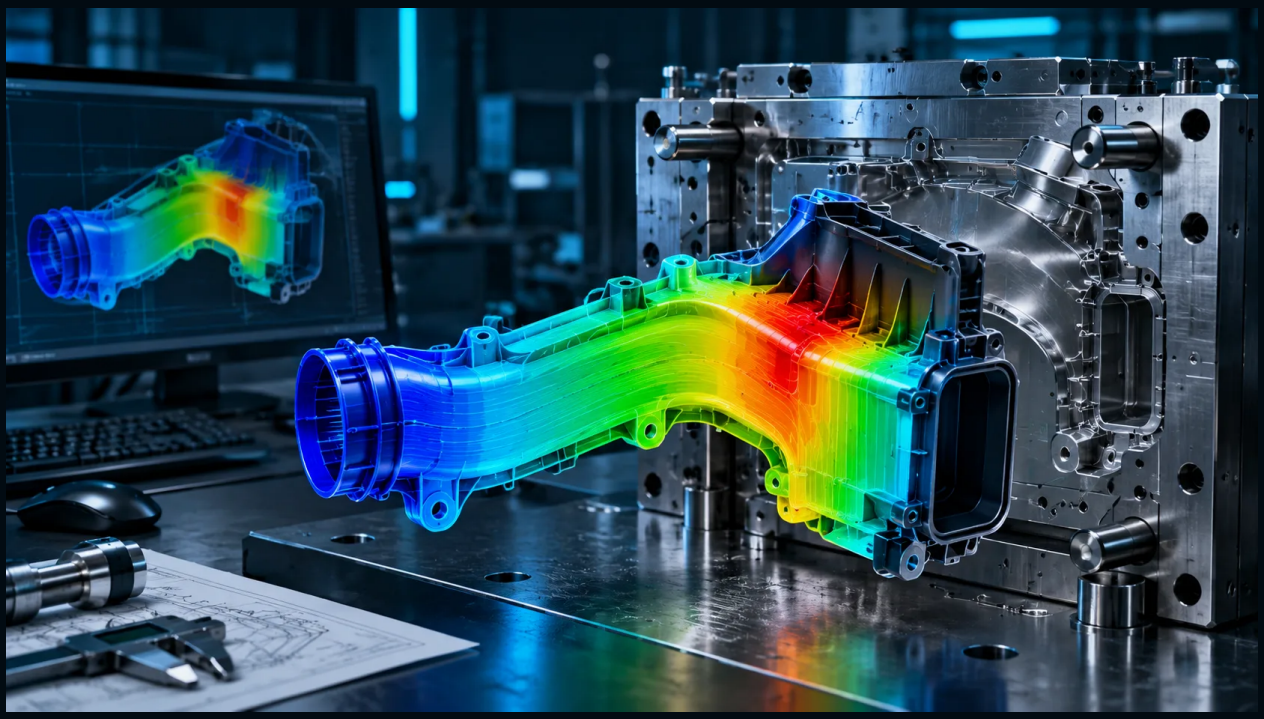
DFM GUIDELINES TEMPLATE

A structured format for turning manufacturability observations into clear, reviewable engineering decisions.



ENGINEERING-LED	PRODUCTION-AWARE	CMS MANAGED

ENGINEERING CONTEXT

This resource supports early technical discussions and structured programme reviews. It does not replace project-specific DFM, material data, simulation, trial evidence or an authorised commercial agreement.

DFM REPORT STRUCTURE

A useful DFM report separates observed geometry, technical risk, recommendation, decision and ownership.

+ Component and revision identification
+ Input assumptions and missing data
+ Finding with annotated view
+ Risk to quality, timing, process or tool life
+ Recommended change or accepted control
+ Customer decision, owner and closure date

GEOMETRY REVIEW

Review the component in the intended mould opening direction and under realistic process constraints.

+ Draft and texture compensation
+ Wall transitions and sink sensitivity
+ Rib and boss proportions
+ Sharp internal corners and stress concentration
+ Assembly datums and tolerance stack
+ Undercut classification and release method

MOULDING BEHAVIOUR

Simulation supports decisions; it does not replace material data, process knowledge or trial evidence.

+ Fill balance and hesitation
+ Pressure demand and clamp requirement
+ Weld lines and air traps
+ Cooling balance and hot spots
+ Volumetric shrinkage
+ Warpage direction and magnitude

DECISION LANGUAGE

Use direct language: what was observed, why it matters, what is recommended and who must decide.

+ Avoid unqualified claims
+ State the material and process assumptions
+ Separate mandatory changes from optimisation opportunities
+ Record accepted deviations
+ Link every closure to updated controlled data

REVIEW RECORD

PROGRAMME CHECKLIST

Use the final column for the document, model view, report, decision reference or responsible owner that closes each point.

CHECK	REVIEW POINT	EVIDENCE / DECISION
[ ]	Revision and material stated	
[ ]	Moulding direction shown	
[ ]	Each finding visually located	
[ ]	Risk described	
[ ]	Recommendation stated	
[ ]	Decision owner assigned	
[ ]	Status visible	
[ ]	Updated CAD received	
[ ]	Final release recorded	